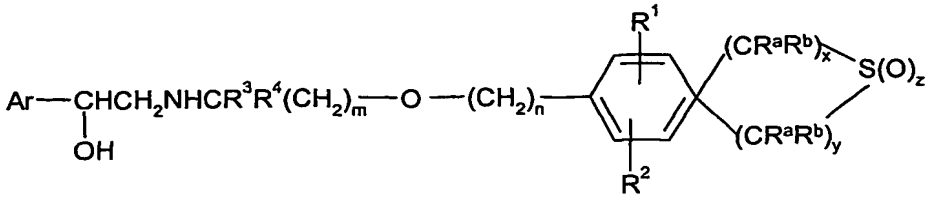
CLAIMS

1. A compound of formula (I)



(I)

or a salt, solvate, or physiologically functional derivative thereof, wherein:

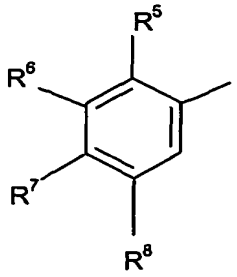
m is an integer of from 2 to 8;
n is an integer of from 3 to 11;
with the proviso that m + n is 5 to 19;
x is zero and y is an integer of 2 or 3 or
y is zero and x is an integer of 2 or 3;
z is zero or an integer of 1 or 2;

R^a and R^b are independently selected from hydrogen and C_{1-4}alkyl;

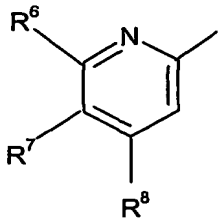
R^1 and R^2 are independently selected from hydrogen, C_{1-6}alkyl, C_{1-6}alkoxy, halo, phenyl, and C_{1-6}haloalkyl;

R^3 and R^4 are independently selected from hydrogen and C_{1-4}alkyl with the proviso that the total number of carbon atoms in R^3 and R^4 is not more than 4;

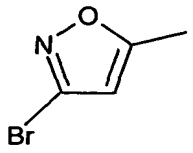
Ar is a group selected from



(a)

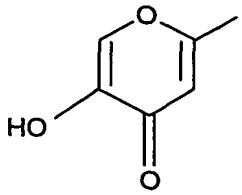


(b)



(c)

and



(d)

wherein R^6 represents hydrogen, halogen, $-(CH_2)_qOR^9$, $-NR^9C(O)R^{10}$, $-NR^9SO_2R^{10}$, $-SO_2NR^9R^{10}$, $-NR^9R^{10}$, $-OC(O)R^{11}$ or $-OC(O)NR^9R^{10}$,
and R^5 represents hydrogen, halogen or C_{1-4}alkyl;

or R^6 represents $-NHR^{12}$ and R^5 and $-NHR^{12}$ together form a 5- or 6- membered heterocyclic ring;

R^7 represents hydrogen, halogen, $-OR^9$ or $-NR^9R^{10}$;

R^8 represents hydrogen, halogen, haloC_{1-4} alkyl, $-OR^9$, $-NR^9R^{10}$, $-OC(O)R^{11}$ or $-OC(O)NR^9R^{10}$;

R^9 and R^{10} independently represent hydrogen or C_{1-4} alkyl or R^9 and R^{10} together with the nitrogen atom to which they are attached form a 5-, 6- or 7- membered nitrogen-containing ring,

R^{11} represents an aryl (eg phenyl or naphthyl) group which may be unsubstituted or substituted by one or more substituents selected from halogen, C_{1-4} alkyl, hydroxy, C_{1-4} alkoxy or halo C_{1-4} alkyl; and

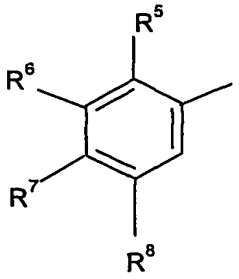
q is zero or an integer from 1 to 4.

2. A compound according to claim 1 wherein R^3 and R^4 are independently selected from hydrogen and methyl.

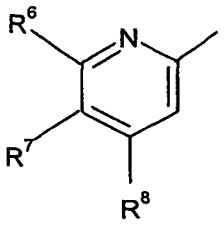
3. A compound according to claim 1 or claim 2 wherein R^1 and R^2 each represent hydrogen.

4. A compound according to any of claims 1 to 3 wherein the integer m is 4, 5 or 6 and n is 3, 4, 5 or 6.

5. A compound according to any of claims 1 to 4 wherein the group Ar is selected from groups (a) and (b).

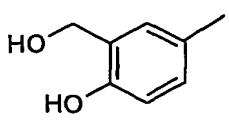


(a)

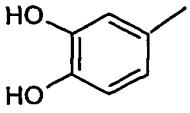


(b)

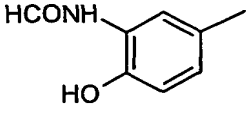
6. A compound according to claim 5 wherein groups (a) and (b) are selected from the following groups (i) to (xxi):



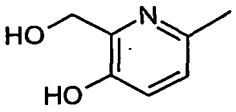
(i)



(ii)

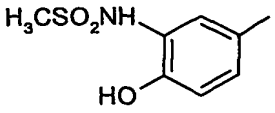


(iii)

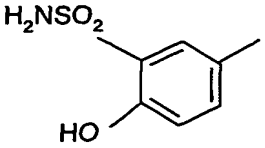


(iv)

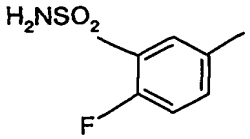
5



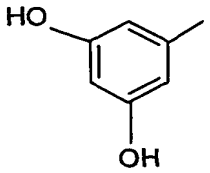
(v)



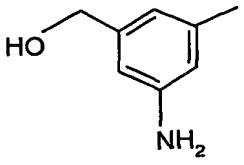
(vi)



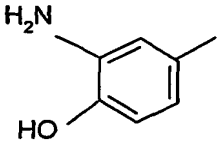
(vii)



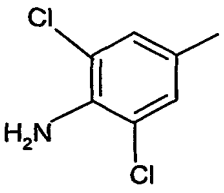
(viii)



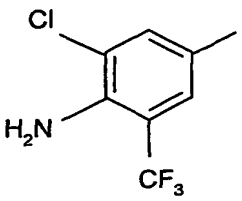
(ix)



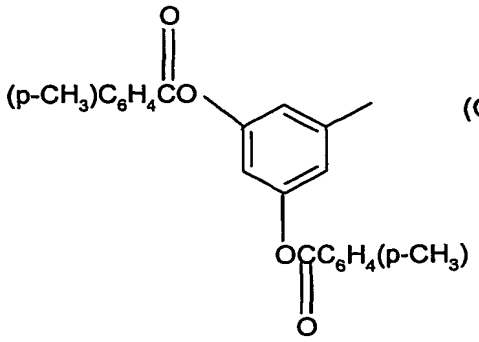
(x)



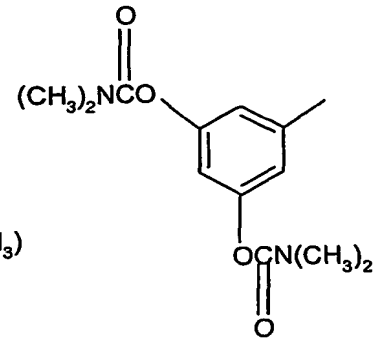
(xi)



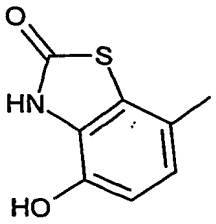
(xii)



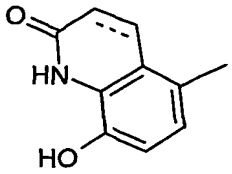
(xiii)



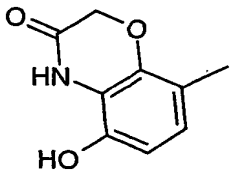
(xiv)



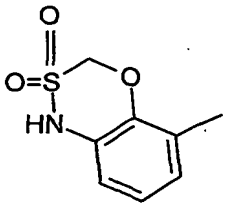
(xv)



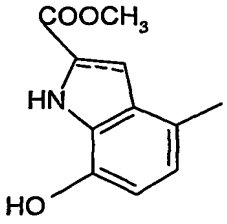
(xvi)



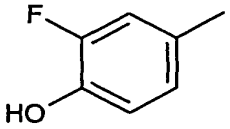
(xvii)



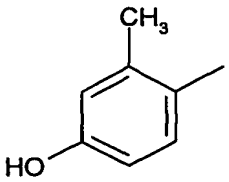
(xviii)



(xix)



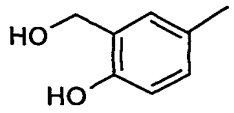
(xx)



(xxi)

5

7. A compound of formula (I) according to any of claim 6 wherein Ar represents group (i).



(i)

8. A compound of formula (I) according to any of claims 1 - 7 wherein z represents 2.

9. A compound of formula (I) according to claim 1 which is selected from:
4-[(1*R*)-2-({6-[4-(1,1-Dioxido-2,3-dihydro-1-benzothien-6-yl)butoxy]hexyl}amino)-1-hydroxyethyl]-2-(hydroxymethyl)phenol;
4-[(1*R*)-2-({6-[4-(1,1-Dioxido-3,4-dihydro-2*H*-thiochromen-7-yl)butoxy]hexyl}amino)-1-hydroxyethyl]-2-(hydroxymethyl)phenol;

and salts, solvates and physiologically functional derivatives thereof.

10. A method for the prophylaxis or treatment of a clinical condition in a mammal, such as a human, for which a selective β_2-adrenoreceptor agonist is indicated, which comprises administration of a therapeutically effective amount of a compound of formula (I), according to any of claims 1-9, or a pharmaceutically acceptable salt, solvate, or physiologically functional derivative thereof.

11. A compound of formula (I), according to any of claims 1-9, or a pharmaceutically acceptable salt, solvate, or physiologically functional derivative thereof for use in medical therapy.

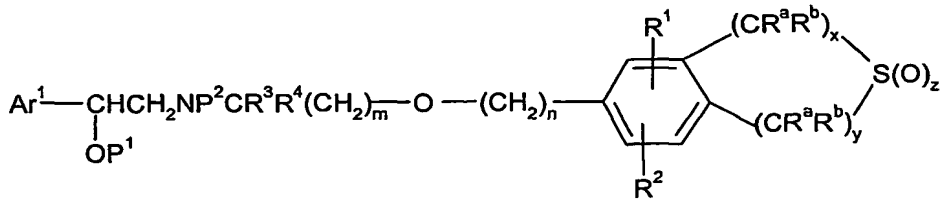
12. A compound of formula (I), according to any of claims 1-9, or a pharmaceutically acceptable salt, solvate, or physiologically functional derivative thereof for use in prophylaxis or treatment of a condition for which a selective β_2-adrenoreceptor agonist is indicated.

13. A pharmaceutical formulation comprising a compound of formula (I), according to any of claims 1-9, or a pharmaceutically acceptable salt, solvate, or physiologically functional derivative thereof, and a pharmaceutically acceptable carrier or excipient, and optionally one or more other therapeutic ingredients.

14. The use of a compound of formula (I), according to any of claims 1-9, or a pharmaceutically acceptable salt, solvate, or physiologically functional derivative thereof in the manufacture of a medicament for the prophylaxis or treatment of a clinical condition for which a selective β_2-adrenoreceptor agonist is indicated.

15. A process for the preparation of a compound of formula (I), according to any of claims 1-9, or a salt, solvate, or physiologically functional derivative thereof, which comprises:

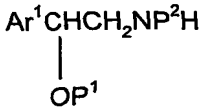
(a) deprotection of a protected intermediate, for example of formula (II):



(II)

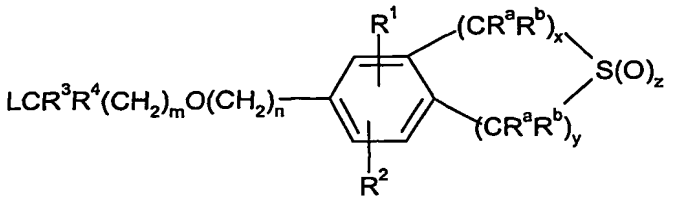
or a salt or solvate thereof, wherein R^a, R^b, R^1, R^2, R^3, R^4, m, n, x, y and z are as defined for the compound of formula (I) or (Ia), Ar^1 represents an optionally protected form of Ar; and P^1 and P^2 are each independently either hydrogen or a protecting group, such that the compound of formula (II) contains at least one protecting group; or

(b) reacting a compound of formula (IV)



(IV)

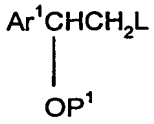
wherein Ar^1 is as defined above for formula (II) and P^1 and P^2, each independently represent hydrogen or a protecting group, with a compound of formula (V):



(V)

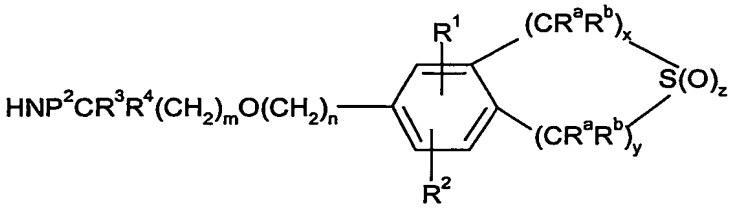
wherein L is a leaving group such as halo or a sulfonate such as an alkylsulfonate an aryl sulfonate or a haloalkylsulfonate, and R^a, R^b, R^1, R^2, R^3, R^4, n, m, x, y and z are as defined for compounds of formula (I); or

(c) reacting a compound of formula (X):



(X)

wherein Ar^1 and P^1 are as hereinbefore defined and L is a leaving group as hereinbefore defined, with an amine of formula (XI):



(XI)

wherein R^a, R^b, R^1, R^2, R^3, R^4, P^2, m, n, x, y and z are as defined for formula (II); followed by removal of any protecting groups;

followed by the following steps in any order:

(i) optional removal of any protecting groups;

(ii) optional separation of an enantiomer from a mixture of enantiomers;

(iii) optional conversion of one compound of formula (I) to a different compound of formula (I)

(iv) optional conversion of the product to a corresponding salt, solvate, or physiologically functional derivative thereof.